

## Statistics Report 09054, Blueberries, frozen, unsweetened

Report Date: June 29, 2017 23:09 EDT

Nutrient values and weights are for edible portion.

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
<b>Proximates</b>													
Water	g	86.59	3	0.573	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Energy	kcal	51	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/1982
Energy	kJ	213	--	--	--	--	--	--	--	--	Calculated or imputed	--	12/2006
Protein	g	0.42	3	0.045	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Total lipid (fat)	g	0.64	3	0.018	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Ash	g	0.18	3	0.018	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Carbohydrate, by difference	g	12.17	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/1982
Fiber, total dietary	g	2.7	--	--	--	--	--	--	--	--	Calculated or imputed	--	08/1982
Sugars, total	g	8.45	--	--	--	--	--	--	--	--	Calculated or imputed	09050	09/2002
<b>Minerals</b>													
Calcium, Ca	mg	8	3	2.486	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Iron, Fe	mg	0.18	3	0.076	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Magnesium, Mg	mg	5	3	0.731	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Phosphorus, P	mg	11	3	2.351	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Potassium, K	mg	54	3	1.202	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Sodium, Na	mg	1	3	0.167	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Zinc, Zn	mg	0.07	3	0.012	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Copper, Cu	mg	0.033	3	0.007	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Manganese, Mn	mg	0.147	3	0.087	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Selenium, Se	µg	0.1	--	--	--	--	--	--	--	--	Calculated or imputed	09050	09/2002
<b>Vitamins</b>													
Vitamin C, total ascorbic acid	mg	2.5	3	2.366	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Thiamin	mg	0.032	3	0.001	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Riboflavin	mg	0.037	3	0.005	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Niacin	mg	0.520	3	0.012	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Pantothenic acid	mg	0.125	3	0.024	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Vitamin B-6	mg	0.059	3	0.002	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Folate, total	µg	7	3	1.257	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Folic acid	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	01/2001
Folate, food	µg	7	3	1.257	--	--	--	--	--	--	Analytical or derived from analytical	--	12/2006
Folate, DFE	µg	7	--	--	--	--	--	--	--	--	Calculated or imputed	--	12/2006
Choline, total	mg	5.1	--	--	--	--	--	--	--	--	Calculated or imputed	09050	12/2006
Vitamin B-12	µg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	08/1982
Vitamin B-12, added	µg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	09/2004
Vitamin A, RAE	µg	2	--	--	--	--	--	--	--	--	Calculated or imputed	--	12/2006

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Retinol	µg	0	--	--	--	--	--	--	--	--	Assumed zero	--	06/2002
Carotene, beta	µg	28	--	--	--	--	--	--	--	--	Calculated or imputed	09050	09/2002
Carotene, alpha	µg	0	--	--	--	--	--	--	--	--	Calculated or imputed	09050	09/2002
Cryptoxanthin, beta	µg	0	--	--	--	--	--	--	--	--	Calculated or imputed	09050	09/2002
Vitamin A, IU	IU	46	--	--	--	--	--	--	--	--	Calculated or imputed	--	12/2006
Lycopene	µg	0	--	--	--	--	--	--	--	--	Calculated or imputed	09050	09/2002
Lutein + zeaxanthin	µg	68	--	--	--	--	--	--	--	--	Calculated or imputed	09050	09/2002
Vitamin E (alpha-tocopherol)	mg	0.48	--	--	--	--	--	--	--	--	Calculated or imputed	09050	09/2002
Vitamin E, added	mg	0.00	--	--	--	--	--	--	--	--	Assumed zero	--	09/2004
Vitamin D (D2 + D3)	µg	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	11/2008
Vitamin D	IU	0	--	--	--	--	--	--	--	--	Assumed zero	--	02/2009
Vitamin K (phylloquinone)	µg	16.4	--	--	--	--	--	--	--	--	Calculated or imputed	09050	09/2002
<b>Lipids</b>													
Fatty acids, total saturated	g	0.053	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
4:0	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
6:0	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
8:0	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
10:0	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
12:0	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
14:0	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
16:0	g	0.031	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
18:0	g	0.011	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
Fatty acids, total monounsaturated	g	0.091	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
16:1 undifferentiated	g	0.002	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
18:1 undifferentiated	g	0.087	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
20:1	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
22:1 undifferentiated	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
Fatty acids, total polyunsaturated	g	0.279	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
18:2 undifferentiated	g	0.167	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
18:3 undifferentiated	g	0.112	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
18:4	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
20:4 undifferentiated	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
20:5 n-3 (EPA)	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
22:5 n-3 (DPA)	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
22:6 n-3 (DHA)	g	0.000	--	--	--	--	--	--	--	--	Calculated or imputed	--	02/1995
Fatty acids, total trans	g	0.000	--	--	--	--	--	--	--	--	Assumed zero	--	06/2015
Cholesterol	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	08/1982
<b>Amino Acids</b>													
Tryptophan	g	0.002	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Threonine	g	0.012	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Isoleucine	g	0.013	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Leucine	g	0.025	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Lysine	g	0.008	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Methionine	g	0.007	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Cystine	g	0.004	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Phenylalanine	g	0.015	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Tyrosine	g	0.005	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Valine	g	0.018	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Arginine	g	0.022	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
Histidine	g	0.006	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Alanine	g	0.018	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Aspartic acid	g	0.033	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Glutamic acid	g	0.052	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Glycine	g	0.017	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Proline	g	0.015	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
Serine	g	0.013	--	--	--	--	--	--	--	--	Analytical or derived from analytical	--	08/1982
<b>Other</b>													
Alcohol, ethyl	g	0.0	--	--	--	--	--	--	--	--	Assumed zero	--	04/1985
Caffeine	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	09/2002
Theobromine	mg	0	--	--	--	--	--	--	--	--	Assumed zero	--	09/2002

Nutrient	Unit	Value Per100 g	Data Points	Std. Error	Min	Max	df	LB	UB	# Studies	Source	NDB Ref	Last Modified
<b>Flavonoids</b>													
Anthocyanidins													
Cyanidin <a href="#">2</a> <a href="#">3</a>	mg	4.36	--	--	1.22	7.5	--	--	--	--	--	--	--
Petunidin <a href="#">3</a>	mg	18.2	--	--	18.16	18.16	--	--	--	--	--	--	--
Delphinidin <a href="#">2</a> <a href="#">3</a>	mg	21.6	--	--	20.4	22.77	--	--	--	--	--	--	--
Malvidin <a href="#">3</a>	mg	49.6	--	--	49.65	49.65	--	--	--	--	--	--	--
Pelargonidin <a href="#">2</a>	mg	0.0	--	--	0.02	0.02	--	--	--	--	--	--	--
Peonidin <a href="#">3</a>	mg	0.5	--	--	0.47	0.47	--	--	--	--	--	--	--
Flavones													
Apigenin <a href="#">2</a>	mg	0.0	--	--	0.01	0.01	--	--	--	--	--	--	--
Luteolin <a href="#">2</a>	mg	1.8	--	--	1.8	1.8	--	--	--	--	--	--	--
Flavonols													
Kaempferol <a href="#">2</a>	mg	1.1	--	--	1.1	1.1	--	--	--	--	--	--	--
Myricetin <a href="#">2</a> <a href="#">4</a>	mg	1.8	--	0.33	0.8	3.5	--	--	--	--	--	--	--
Quercetin <a href="#">2</a> <a href="#">4</a>	mg	4.6	--	0.93	2.2	8.9	--	--	--	--	--	--	--
Proanthocyanidin													
Proanthocyanidin dimers <a href="#">1</a>	mg	6.1	--	0.33	0	0	--	--	--	--	--	--	--
Proanthocyanidin trimers <a href="#">1</a>	mg	5.4	--	0.51	0	0	--	--	--	--	--	--	--
Proanthocyanidin 4-6mers <a href="#">1</a>	mg	18.7	--	0.53	0	0	--	--	--	--	--	--	--
Proanthocyanidin 7-10mers <a href="#">1</a>	mg	3.9	--	0.78	0	0	--	--	--	--	--	--	--

<sup>1</sup>Brownmiller, C., Howard, L.R., and Prior, R.L. **Processing and storage effects on procyanidin composition and concentration of processed blueberry products**, 2009 J. Agric. Food Chem. 57 pp.1896-1902

<sup>2</sup>Franke, A.A., Custer, L.J., Arakaki, C., and Murphy, S.P. **Vitamin C and flavonoid levels of fruits and vegetables consumed in Hawaii.**, 2004 J. Food Comp. Anal. 17 pp.1-35

<sup>3</sup>Lee, J., Durst, R.W., and Wrolstad, R.E. **Impact of juice processing on blueberry anthocyanins and polyphenolics: comparison of two pretreatments.**, 2002 J. Food Sci. 67 5 pp.1660-1667

<sup>4</sup>Häkkinen, S. H., Törrönen, A. R. **Content of flavonols and selected phenolic acids in strawberries and Vaccinium species: influence of cultivar, cultivation site and technique.**, 2000 Food Res. Int. 33 pp.517-524